

## Mercury and Air Quality in SC

## Hazardous air pollutants

The Federal Clean Air Act regulates mercury and 187 other "hazardous air pollutants" or air toxics\*. Companies or facilities whose actions release air toxics must have Clean Air Act operating permits. They must also meet the science-based emission standards for pollutants they release. Any South Carolina facility that emits hazardous air pollutants must request a permit from DHEC's Bureau of Air Quality.

There are currently 13 coal-fired power plants that emit mercury and have a permit with DHEC. Another 367 permitted facilities, such as hospitals and industries, have some amount of mercury emissions. Data sent to DHEC from permit holders is used to calculate the levels of pollutants, including mercury, released from the permitted facilities in the state.

Large manufacturing plants report the amount of mercury and other toxic compounds they release to the Federal Toxics Release Inventory (TRI). The data sent to the TRI is from the monitoring of normal activities. The TRI reports to the public how the release of a pollutant increases or decreases from year to year. These data do not tell about exposure or health risks.

\* DHEC's BAQ regulates federal air toxics and some additional air pollutants that are named in state regulations.

## Monitoring for mercury

DHEC monitors for airborne mercury at one site in the state. The monitor is located in an upland area of Congaree National Park in lower Richland County. Since 1996, DHEC has supported a National Atmospheric Deposition - Mercury Deposition Network site at the same location to track Mercury in precipitation.

There is another Mercury Deposition site, operated by the U.S. Fish and Wildlife Service, in the Cape Romain National Wildlife Refuge near Charleston.

## Federal Air Regulations

On March 15, 2005, the EPA issued the Clean Air Mercury Rule (CAMR) to deal with mercury emissions from coal-fired power plants. Twelve of the thirteen coal-fired utilities in South Carolina are affected by CAMR. CAMR sets limits on the amount of mercury that coal-fired power plants can emit. The CAMR will reduce mercury emissions from coal-fired power plants nationwide by 70% after 2017.

The Clean Air Interstate Rule (CAIR), issued by the EPA on March 10, 2005, will reduce mercury emissions also. The goal of the CAIR is to reduce air pollution that moves between states. CAIR sets limits on nitrous oxide (NOx) and sulfur dioxide (SO<sub>2</sub>) emissions from power plants. Methods used to reduce NOx and SO<sub>2</sub> will reduce mercury emissions at the same time.

More information on CAIR and CAMR may be found at: http://www.scdhec.gov/egc/bag/html/CAIR.asp